

J.C.S. 1823/136

4 May 1953

Pages 849 - 855, incl.

(LIMITED DISTRIBUTION This document consist of

REPORT BY THE JOINT STRATEGIC PLANS COMMITTEE

to the

JOINT CHIEFS OF STAFF

on

MILITARY REQUIREMENTS FOR ATOMIC WEAPONS References:

THE PROBLEM

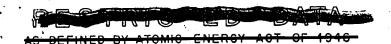
- 1. Pursuant to a directive by the Joint Chiefs of Staff, SM-897-53, dated 30 April 1953 (see Decision On J.C.S. 1823/118), to complete the current study on military requirements for atomic weapons to determine:
 - a. The desired atomic weapons stockpile of non-nuclear components as of 1 July 1954 and 1 July 1955.
 - b. The desired number of Bomb-to-Missile-Warhead-Conversion-Components (B/MWH CC) kits as of 1 July 1954 and 1 July 1955.
 - c. The desired number of Adaption Kits (AK) as of 1 July 1954.

FACTS BEARING ON THE PROBLEM AND DISCUSSION

2. The composition of the stockpile of nuclear components of atomic weapons as of 1 July 1954 and 1 July 1955 was established

| מתים דת | RIBUTION Lee De | cision on, Its 13 way 53 |
|---------|---------------------------|-------------------------------|
| 0.011 | lae Ci | Gen. Lee (Dir. Plans, Air) |
| Gen. | Bradley (C/JCS) | Gen. Lee (Dir. Plans, Air) |
| | Collins (CSA) | Gen. Thatcher (DD Plans, Air) |
| Adm. | Fechteler (CNO) | 0.00 10.000 0.00 (7) (70) |
| | Vandenberg (CSAF) | Gen. J.S. Eradley (DDSP) |
| Gen. | Lemnitzer (DC/S,P) | Secy, JCS |
| | Eddleman (Asst. C/S, G-3) | Secy, JSSC |
| | Caraway (Ch. Plans, G-3) | Secy, JSPC |
| | Gardner (DCNO-Op) | Gen. Samford (AFOIN) |
| | Eurke (ACNO-On30) | Gen. Bunker (AFOAT) |

Gen. White (DC/S-Op, Air)





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by SM-665-53, dated 27 March 1953, and SM-805-53, dated 16 April 1953 (Enclosures "A" and "B" respectively to Decision On J.C.S. 1823/118), and is as follows:

Core

ABLE

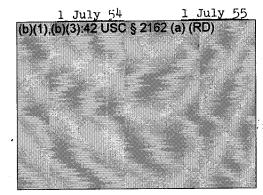
BAKER

CHARLIE

DOG

GUN TYPE

TARE



3. For further facts bearing on the problem and discussion see Enclosure $^{\rm BB}$.

RECOMMENDATION

4. That the memorandum in Enclosure "A" be forwarded to the Chairman, Military Liaison Committee (MLC) to the Atomic Energy Commission (AEC).

*On file in J.C.S. Secretariat

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ENCLOSURE "A"

DRAFT

MEMORANDUM FOR THE CHAIRMAN, MILITARY LIAISON COMMITTEE TO THE ATOMIC ENERGY COMMISSION

Subject: Military Requirements for Atomic Weapons

- 1. Reference is made to our memorandums for you, SM-665-53 dated 27 March 1953, and SM-805-53, dated 16 April 1953, subject as above.
- 2. The referenced memorandums stated the desired composition of the stockpile of nuclear components as of 1 July 1954 and 1 July 1955.
- 3. The desired composition of the stockpile of non-nuclear components of atomic weapons is as follows:

| Type | 1 Jul 54 | 1 Jul 55 | |
|----------|----------|----------|--|
| MK 6/13 | 100% | 90% | of the total number of A, B, C cores. |
| MK 5 | 28.5% | 20.4% | of the total number of A, B, C cores. |
| MK 7 | 75% | 65% | of the total number of A, B, C cores. |
| MK 8/11 | 100% | 100% | of the total number of Gun-type cores. |
| MK 9 | 100% | 100% | of the total number of Gun-type cores. |
| MK 12(2) | 30% | 30% | of the total number of B cores. |
| мк 18 | 100% | 100% | of the total number of D cores. |
| Thermo. | 100% | 100% | of the total number of T cores. |

NOTE: (1) The foregoing include non-nuclear components desired for guided and unguided missiles. If at any time more efficient MARK or MOD weapons are developed, tested and accepted by the DOD as replacements for those designated above, the non-nuclear components in quantities stated above will be understood to apply to these new and im(b)(1),(b)(3):42 USC § 2162 (a) (RD) proved weapons.

(2) Production shall be the







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- 4. Interchangeability between atomic bombs and atomic warheads for missiles is considered feasible and the Joint Chiefs of Staff urge the Atomic Energy Commission (AEC) to achieve true interchangeability as soon as possible.
- 5. With respect to atomic warheads for missiles, the Joint Chiefs of Staff and the AEC have concurred in the definitions for:
 - a. Warhead.
 - b. Warhead Installation.
 - c. Adaption Kit.

The Joint Chiefs of Staff have adopted the following definitions for military use and request you seek AEC concurrence:

Bomb to Missile Warhead Conversion Components (B/MWH CC):

Those components necessary to convert a given bomb into a given missile warhead. (Adaption kit components, when used with a given missile warhead, will adapt it to a particular missile.)

NOTE: This definition presupposes that true interchangeability, independent of warhead-missile combination, has been attained. Such is not the case, and until it is, the requirements for B/MWH CC's must be stated for given warhead-missile combinations. However, the Joint Chiefs of Staff reaffirm their desire for true interchangeability independent of the warhead-missile combination. The Joint Chiefs of Staff desire to be informed, as soon as practicable the estimated date on which true interchangeability can be achieved, i.e. when one E/MWH CC can be used to convert a specific bomb to a warhead for any missile carrying that warhead.

Missile Warhead to Bomb Conversion Components (MWH/B CC's):
Those components necessary to convert a given missile warhead into a given bomb.

6. The AEC has been assigned interim fuzing responsibility for MATADOR, REGULUS, CORPORAL, and HONEST JOHN. The Joint Chiefs of Staff believe that a clear division of responsibility between the AEC and the Department of Defense (DOD) should be made with respect to development and production of the various items that go to make up warhead installation. They propose that:

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- \underline{a} . The interim fuzing responsibility assigned the AEC for the above missiles terminate on 1 July 1954.
- <u>b</u>. Responsibility for development and production of Adaption Kits be assigned now to the DOD for missiles, other than MATADOR, REGULUS, CORPORAL, and HONEST JOHN, and for all missiles after 1 July 1954.
- \underline{c} . Responsibility for development and production of B/MWH CC and MWH/B CC kits be assigned to the AEC.
- 7. Providing the AEC concurs in paragraph 5 and 6 above, military requirements for Adaption Kits and Bomb to Missile Warhead Conversion Components are as follows:
 - \underline{a} . For the interim period, ending 30 June 1954, military requirements for Adaption Kits are:

Missile

CORPORAL (XW-7)

MATADOR (XW-5)

REGULUS (XW-5)

HONEST JOHN (XW-7)

Number (b)(1),(b)(3):42 USC § 2162 (a) (RD)

b. For the period ending 30 June 1955, military requirements for B/MWH CC are:

Type

B/MWH CC/5 (RASCAL)

B/MWH CC/5 (MATADOR)

B/MWH CC/5 (REGULUS)

B/MWH CC/7 (CORPORAL)

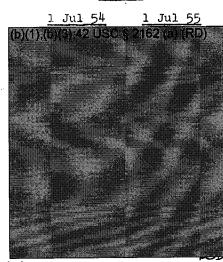
B/MWH CC/7 (HONEST JOHN)

E/MWH CC/7 (BETTY)

B/MWH CC/7 (BOAR)

B/MWH CC/13 (SNARK)

Number



*Figures on file in J.C.S. Secretariat

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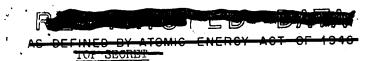
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Enclosure "A"

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ENCLOSURE "B"

FACTS BEARING ON THE PROBLEM AND DISCUSSION

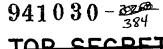
- 1. In a memorandum for the Chairman, MLC to the AEC, SM-1361-52, dated 4 June 1952 (Enclosure "A" to J.C.S. 2096/4), the Joint Chiefs of Staff stated that a military requirement exists for the production of thermonuclear weapons giving yields of one megaton upward, provided they would be compatible in size, shape, and weight with delivery systems that will be available in 1954.
- 2. A development requirement for a one-megaton fission weapon was established by a memorandum for the Chairman, MLC to the AEC, SM-742-53, dated 7 April 1953 (Enclosure "A" to J.C.S. 1823/130).
- 3. As the stockpile of nuclear components grows, the ratio of non-nuclear to nuclear components should decrease, because flexibility is achieved by the larger number of nuclears and the cost of producing, storing, and maintaining non-nuclears becomes astronomical.
- 4. Ey a memorandum for the Chairman, MLC to the AEC, SM-1756-52, dated 21 July 1952 (Enclosure "A" to J.C.S. 1823/100), the Joint Chiefs of Staff concurred with the MLC in the division of responsibility between the AEC and the Department of Defense (DOD) for the development and production of warheads and adaption kits. They noted that AEC had interim fuzing responsibility for CORPORAL, MATADOR, REGULUS, and HONEST JOHN. However, the date at which the interim fuzing responsibility was to terminate was not determined. This should be done in order that the Services might assume responsibility for Adaption Kits and the AEC assume responsibility for B/MWH/CC kits on a

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Enclosure "B"













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clear-cut basis. I July 1954 should be established as the termination date for interim fuzing responsibility of the AEC as this would allow for the orderly assumption of this responsibility by the DOD.

- 5. In a memorandum for the Chairman, MLC to the AEC, SM-406-53 dated 26 February 1953 (Enclosure "A" to J.C.S. 1823/120), the Joint Chiefs of Staff requested the MLC to obtain the concurrence of the AEC in the definitions of B/MWH CC and "Missile Warhead to Bomb Conversion Components" (MWH/B CC) contained in the Enclosure to J.C.S. 1823/114. The Joint Chiefs of Staff also stated that requirements for guided missile war heads would be stated in requirements for "Bomb to Missile Warhead Conversion Components", and "Adaption Kits" that are procured by the AEC. If the date of 1 July 1954 mentioned in paragraph 4 above is established, the requirements for guided missile warheads could be stated in requirements for B/MWH CC hits only, after that date.
- 6. By Decision On J.C.S. 1823/120, the Joint Chiefs of Staff approved stockpiling of atomic weapons in the form of bombs until such time as they should establish requirements for ready bombs and ready missile warheads. MWH/B CC kits will be required when atomic weapons are stored as ready missile warheads, but will not be required until then. It is not anticipated that a requirement for stock-iling of ready missile warheads will be established until some time after 1 July 1956.

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9410 30 - 335 Enclosure "B"

